AMENDMENT TO THE CLAIMS

Please cancel claims 33-38.

Please amend claim 20 as shown below.

1. (Original) A method of processing contrast enhanced medical imaging information, the medical imaging information corresponding to a time dependent imaging signal behavior associated with at least one tissue volume, the method comprising:

automatically determining whether a portion of a tissue volume exhibits an imaging signal washout behavior;

automatically determining whether the portion of a tissue volume exhibits one from the group of an imaging signal plateau behavior and an imaging signal persistent enhancement behavior in the event that the portion of a tissue volume fails to exhibit an imaging signal washout behavior; and

identifying at least one likely malignancy within the portion of the tissue volume.

- 2. (Original) The method of claim 1, wherein identifying comprises generating a visual indication of a type of time dependent imaging signal behavior corresponding to the portion of a tissue volume.
- 3. (Original) The method of claim 1, wherein the medical imaging information comprises Magnetic Resonance Imaging data.
- 4. (Original) The method of claim 1, wherein the medical imaging information corresponds to a breast.
- 5. (Original) A method of processing contrast enhanced medical imaging information, the medical imaging information comprising imaging signal intensity values associated with at least one candidate voxel set corresponding to a tissue volume, the method comprising:

automatically determining whether a candidate voxel set exhibits an imaging signal washout behavior;

automatically determining whether a candidate voxel set exhibits one from the group of an imaging signal plateau behavior and an imaging signal persistent enhancement behavior in the event that a candidate voxel set fails to exhibit an imaging signal washout behavior; and

identifying a candidate voxel set as a likely malignancy.

- 6. (Original) The method of claim 5, wherein determining whether a candidate voxel set exhibits an imaging signal washout behavior comprises determining whether a signal enhancement ratio corresponding to a candidate voxel set exceeds a washout threshold value.
- 7. (Original) The method of claim 6, wherein the washout threshold value is approximately equal to 1.1.
- 8. (Original) The method of claim 5, wherein determining whether a candidate voxel set exhibits an imaging signal washout behavior comprises determining whether a slope corresponding to a candidate voxel set is less than a washout slope value.
- 9. (Original) The method of claim 8, wherein the washout slope value is approximately equal to -2.0 percentage units per minute.
- 10. (Original) The method of claim 5, wherein determining whether a candidate voxel set exhibits an imaging signal washout behavior comprises determining whether an angle corresponding to a candidate voxel set is less than a washout angle value.
- 11. (Original) The method of claim 10, wherein the washout angle value is approximately equal to –5 degrees.

- 12. (Original) The method of claim 5, wherein identifying a candidate voxel set as a likely malignancy comprises identifying a highest percent enhancement value corresponding to a candidate voxel set.
- 13. (Original) The method of claim 5, wherein identifying a candidate voxel set as a likely malignancy comprises identifying a most significant imaging signal intensity decline corresponding to a candidate voxel set.
- 14. (Original) The method of claim 5, wherein identifying a candidate voxel set as a likely malignancy comprises identifying a most significant rate of imaging signal intensity decline corresponding to a candidate voxel set.
- 15. (Original) The method of claim 5, wherein identifying a candidate voxel set as a likely malignancy comprises generating at least one from the group of a numerical, a textual, a chromatic, and a graphic indication of the likely malignancy.
- 16. (Original) The method of claim 5, wherein identifying a candidate voxel set as a likely malignancy comprises generating upon a display device an indication of the likely malignancy.
- 17. (Original) The method of claim 5, wherein identifying a candidate voxel set as a likely malignancy comprises visually indicating a type of curve representing a time dependent imaging signal behavior that corresponds to the candidate voxel set.
- 18. (Original) The method of claim 5, wherein identifying a candidate voxel set as a likely malignancy comprises displaying one from the group of a washout curve, a plateau curve, and a persistent enhancement curve.
- 19. (Original) The method of claim 5, wherein determining whether a candidate voxel set exhibits an imaging signal plateau behavior comprises determining

whether a signal enhancement ratio corresponding to a candidate voxel set is less than a first threshold value and greater than a second threshold value.

- 20. (Currently Amended) The method of claim 2019, wherein the first threshold value is approximately equal to 1.1, and the second threshold value is approximately equal to 0.9.
- 21. (Original) The method of claim 5, wherein determining whether a candidate voxel set exhibits an imaging signal plateau behavior comprises determining whether a slope corresponding to a candidate voxel set is less than a first slope value and greater than a second slope value.
- 22. (Original) The method of claim 21, wherein the first slope value is approximately equal to 2 percentage units per minute and the second slope value is approximately equal to –2 percentage units per minute.
- 23. (Original) The method of claim 5, wherein determining whether a candidate voxel set exhibits an imaging signal plateau behavior comprises determining whether a slope corresponding to a candidate voxel set is less than a first angle value and greater than a second angle value.
- 24. (Original) The method of claim 23, wherein the first angle value is approximately equal to 5 degrees and the second angle value is approximately equal to –5 degrees.
- 25. (Original) The method of claim 5, wherein identifying a candidate voxel set as a likely malignancy comprises identifying a flattest imaging signal intensity relative to a time period.

- 26. (Original) The method of claim 5, wherein identifying a candidate voxel set as a likely malignancy comprises identifying a most strongly enhancing imaging signal intensity relative to a time period.
- 27. (Original) The method of claim 5, wherein determining whether a candidate voxel set exhibits an imaging signal persistent enhancement behavior is performed in the event that a candidate voxel set fails to exhibit an imaging signal washout behavior and a candidate voxel set fails to exhibit an imaging signal plateau behavior.
- 28. (Original) The method of claim 5, wherein the medical imaging information comprises Magnetic Resonance Imaging data.
- 29. (Original) The method of claim 5, wherein the medical imaging information corresponds to a breast.
- 30. (Original) A method of processing contrast enhanced medical imaging information, the medical imaging information comprising imaging signal intensity values associated with at least one candidate voxel set corresponding to a tissue volume, the method comprising:

automatically determining whether a candidate voxel set exhibits an imaging signal washout behavior;

automatically determining whether a candidate voxel set exhibits an imaging signal plateau behavior after determining whether a candidate voxel set exhibits an imaging signal washout behavior; and

identifying a candidate voxel set as a likely malignancy.

31. (Original) A method of processing contrast enhanced medical imaging information, the medical imaging information comprising imaging signal intensity values associated with at least one candidate voxel set corresponding to a tissue volume, the method comprising:

automatically determining whether a candidate voxel set exhibits an imaging signal washout behavior;

identifying a candidate voxel set as a likely malignancy corresponding to a washout behavior in the event that a candidate voxel set exhibits an imaging signal washout behavior:

automatically determining whether a candidate voxel set exhibits an imaging signal plateau behavior in the event that a candidate voxel set fails to exhibit an imaging signal washout behavior; and

identifying a candidate voxel set as a likely malignancy corresponding to a plateau behavior in the event that a candidate voxel set fails to exhibit an imaging signal washout behavior and exhibits an imaging signal plateau behavior.

32. (Original) The method of claim 31, further comprising identifying a candidate voxel set as a likely malignancy corresponding to a persistent enhancement behavior in the event that a candidate voxel set fails to exhibit an imaging signal washout behavior and a candidate voxel set fails to exhibit an imaging signal plateau behavior.

33-38. (Canceled)

39. (Original) A computer readable medium containing program instructions for:

automatically determining whether a candidate voxel set that forms a portion of a medical imaging data set corresponding to a tissue volume exhibits an imaging signal washout behavior;

automatically determining whether a candidate voxel set that forms a portion of a medical imaging data set exhibits one from the group of an imaging signal plateau behavior and an imaging signal persistent enhancement behavior in the event that a candidate voxel set fails to exhibit imaging signal washout behavior; and identifying a candidate voxel set as a likely malignancy.

- 40. (Original) The computer readable medium of claim 39, wherein the program instructions for determining whether a candidate voxel set exhibits an imaging signal washout behavior comprise program instructions for performing at least one from the group of a signal enhancement ratio analysis, an imaging signal intensity change analysis, and an imaging signal rate of intensity change analysis.
- 41. (Original) The system of claim 39, wherein the program instructions for determining whether a candidate voxel set exhibits an imaging signal plateau behavior comprise program instructions for performing at least one from the group of a signal enhancement ratio analysis, an imaging signal intensity change analysis, and an imaging signal rate of intensity change analysis.
- 42. (Original) The computer readable medium of claim 39, wherein the program instructions for identifying a candidate voxel set as a likely malignancy comprise program instructions for performing at least one from the group of a percent enhancement value analysis, an imaging signal intensity change analysis, and an imaging signal rate of intensity change analysis.
- 43. (Original) The computer readable medium of claim 39, wherein the program instructions for identifying a candidate voxel set as a likely malignancy comprise program instructions for generating at least one from the group of a numerical, a textual, a chromatic, and a graphic indication of the likely malignancy.
- 44. (Original) The computer readable medium of claim 39, wherein the program instructions for identifying a candidate voxel set as a likely malignancy comprise program instructions for displaying a curve corresponding to the candidate voxel set.